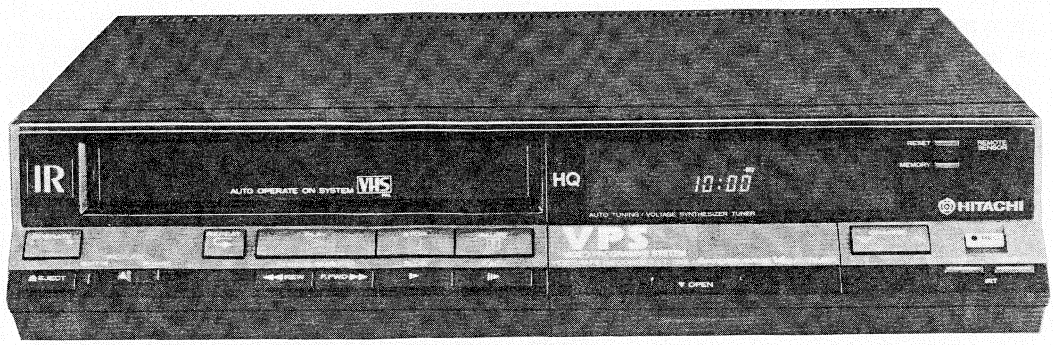
HITACHI VIDEO DECK

VT-125E(VPS)/VT-130E(VPS)

VT-125E(VPS)



VT-130E(VPS)

Instruction manual

To obtain the best performance and ensure years of trouble-free use, please read this instruction manual completely.

VHS
PAL

FOR YOUR SAFETY

Do not remove panel covers by unscrewing. There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

Mains supply: AC 220V, 50 Hz only
The OPERATE switch located on the front panel of the VTR switches the VTR to on and off, leaving the clock/timer facility unaffected.
As to the indication of the OPERATE switch, "I" shows ON and "⏻" shows electrical power stand-by.

If the unit is to be left unattended for a long period and it is not intended to use the timer recording function, it is recommended that the unit be completely switched off and the plug removed. If you intend to record during your absence, remember there is no necessity for the TV receiver to be switched on.

WARNING: It is permissible to record television programmes only in the event that third party copyrights and other rights are not violated.

NOTE:
1. This unit can receive programmes which are broadcasted in the GDR, and record and play back colour television signals.
2. When the cassette recorded in above 1 is played back on a SECAM or PAL recorder, a black and white picture will be obtained.
3. When a cassette recorded on a SECAM recorder or a SECAM prerecorded cassette is played back by this unit, a black and white picture will be obtained.
4. This unit cannot be used in France. Please use a SECAM recorder there.

Precautions
- The VTR is designed for use in horizontal position only.
- Allow for air circulation at bottom, top and back of unit.
- Avoid extreme heat, cold, moisture and dust.
- Avoid use near magnetic fields and places subject to strong vibrations.
- Do not insert wires, etc. through the cassette compartment.
- Do not move the unit from a hot place to a cold place or vice versa.
- Be careful; when the surface of the case is wiped with a volatile agent such as benzine, alcohol, thinner, etc., or a chemically processed cloth, the surface finish may deteriorate or its coating may peel.

FEATURES

- **Video programme system (VPS)**
- **The remote control unit provided also allows you to programme the timer**
- **Programmable channel memory with voltage synthesized tuner**
- **Setting 4 programmes/2 week is possible with built-in programmable timer**
- **Instant recording timer (IRT)**
- **Visual search**
- **Convenient front loading**
- **Soft touch operating controls**
- **Automatic rewind**
- **Rewind shut off**
- **Tape-in indicator light**
- **Repeat feature**
- **Slow feature (Only for VT-130E)**

CONTENTS

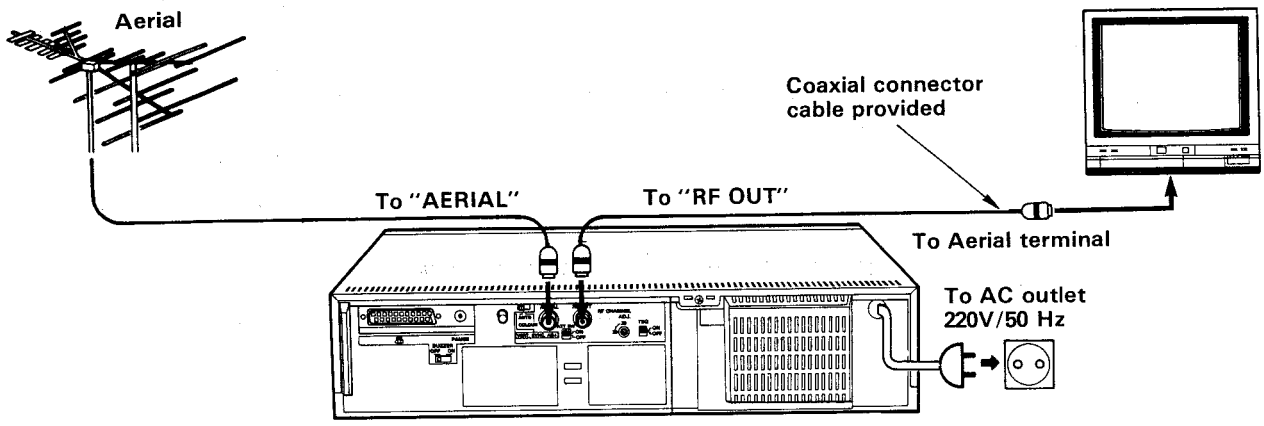
INSTALLATION 3
CONTROLS AND FUNCTIONS 4
VIDEO CHANNEL SETTING 6
PRE-TUNING OF BUILT-IN TV TUNER 6
CLOCK TIME SETTING 8
CASSETTE TAPES 9
RECORDING TV PROGRAMMES 9
INSTANT RECORDING TIMER (IRT) 10
PLAYBACK 11
REMOTE OPERATION 12
TIMER RECORDING 13
MAINTENANCE 15
PROBLEM GUIDE 15
SPECIFICATIONS 16
VPS FUNCTION 17

Moisture condensation
If you pour a cold liquid into a glass, water vapor in the air will condense on the surface of the glass. This is moisture condensation.
Moisture condensation on the head drum, one of the most crucial parts of the VTR, will cause damage to the tape.
The VTR should not be operated for at least 2 hours after being moved from a cold to a hot environment to avoid condensation from occuring on the head drum.

HQ **The Video Tape Recorder (VTR) with this marking incorporates VHS high-quality picture technology and is compatible with any Video Tape Recorders bearing the VHS mark.**

INSTALLATION

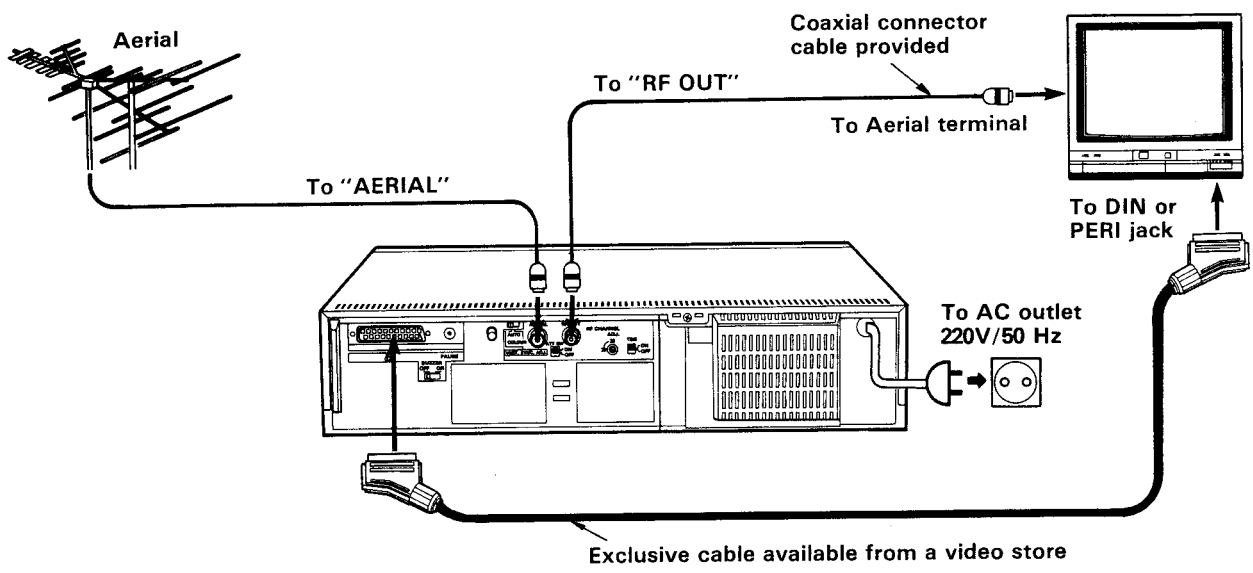
BASIC METHOD



1. Remove the coaxial aerial cable from your TV set. Place this cable into the terminal marked "AERIAL" on the VTR.
2. Connect your TV to the RF OUT terminal with the supplied coaxial connector cable.
3. Plug into the mains.

APPLICATION METHOD

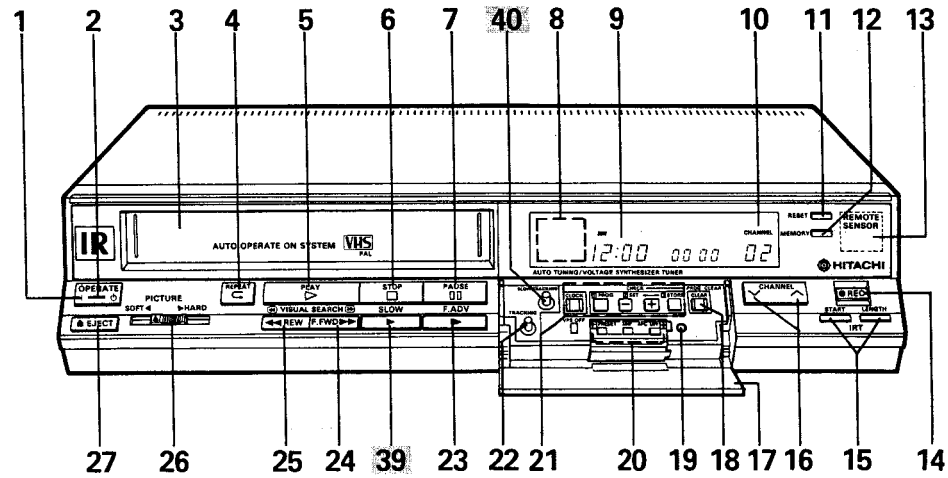
When your VTR is connected to a TV set provided with a DIN or PERI jack, follow the connections below. You can record and playback much better pictures than using the above connections.
You need an exclusive cable available from a video store when you make the following connections.
An exclusive cable may not be available in some areas. In such an area, you must use the BASIC METHOD for connections.



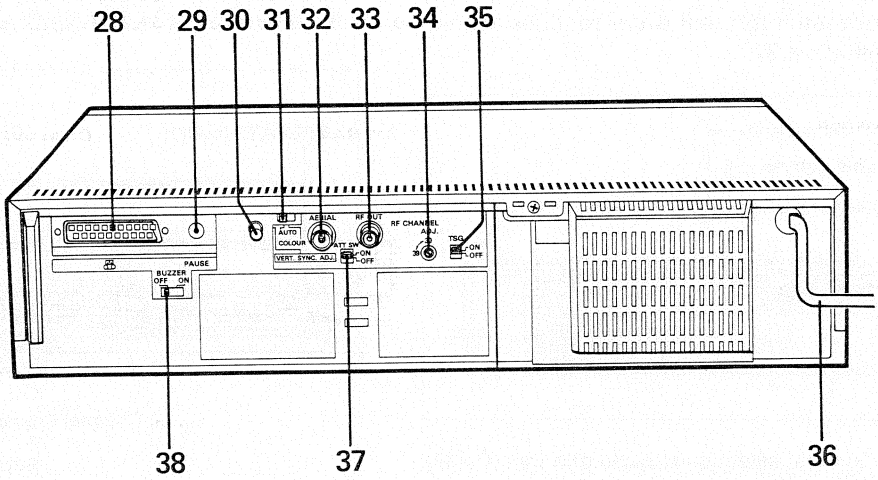
1. Make connections 1 to 3 in BASIC METHOD.
2. Connect the input and output jacks on the rear of the VTR and the DIN or PERI jack of the TV set using the exclusive cable.

With this connection method:
- During playback, the signals from the PERI jack of the VTR are fed to your TV.
- You can record the program selected by the channel select button of the TV set. In this case, press the CHANNEL select button (forward or reverse) so as to have "AUX" indication light up on the display.

CONTROLS AND FUNCTIONS



1. **OPERATE SWITCH**
   Turn system power on and off.
2. **OPERATE INDICATOR**
3. **CASSETTE COMPARTMENT**
   Insert a cassette in through the door, and loading will be completed automatically.
   Note: Power is turned on automatically when the cassette is loaded.
4. **REPEAT BUTTON**
   Press this button after pressing the PLAY button to repeat the scene you have just viewed during playback. The tape is rewound to the position where PLAY button was pressed, then the tape is played back from that position.
5. **PLAY BUTTON**
6. **STOP BUTTON**
   The STOP button must be pressed between "RECORD" and any other operation.
7. **PAUSE BUTTON**
   Press to pause during recording.
   Press to view a still picture during playback.
   Press again to release.
8. **MODE INDICATORS**
   - " ⊡ " appears when a cassette is in the compartment.
   - " PLAY " appears during the playback mode.
   - " REC " appears during the record mode.
   - "◀◀" appears during the rewind mode and flashes during rewind visual search mode.
   - "▶▶" appears during the fast forward mode and flashes during forward visual search mode.
   - " ❚❚ " appears during the play/record pause mode.
   - " ⏲ " appears when turning the power off after programming the timer.
9. **DIGITAL DISPLAY**
   This shows the time with a 24-hour display and shows the tape position.
10. **CHANNEL INDICATOR DISPLAY**
    This shows the channel number corresponding to the channel selected.
11. **COUNTER RESET BUTTON**
    To reset counter to "0000".
12. **MEMORY BUTTON**
    Press this button so "M" is indicated in the display, then fast forward or rewind the tape. The tape stops when the counter reaches approximately "0000".
    Note: Press the button again to switch off the "M" indicator.
13. **INFRARED RAY RECEIVING SECTION**
    Receives infrared rays from remote control unit.
14. **RECORD BUTTON**
    Press RECORD button to record.
15. **INSTANT RECORDING TIMER BUTTONS (IRT)**
    This allows unattended recording.
    Timer will switch the VTR off automatically at a preselected time. This is convenient when you go out during recording.
16. **CHANNEL SELECT BUTTONS**
    Select the channels you wish to view or record by pressing these buttons.
    And you can also select the "AUX" position* by pressing this button to record or watch the programme input at the PERI jack.
    * One channel position either higher or lower outside the range of your preset channels.
17. **SECONDARY CONTROL DOOR**
18. **PROGRAMME CLEAR BUTTON**
    Press the button to clear the programming information.



19. TIMER RESET SWITCH
Press this switch if the digital display malfunctions or no display appears to reset the display. Set the correct present time for the clock then programme the timer.

20. CHANNEL PRESET BUTTONS

21. TIME SET BUTTONS

22. TRACKING CONTROL
To minimize noise in playback.

23. FRAME ADVANCE BUTTON
When you hold FRAME ADVANCE button down during still playback mode, tape will be played back frame by frame. Operates only after PAUSE button has been pressed.

24. FAST FORWARD/VISUAL SEARCH BUTTON
Press to activate fast forward.
Press this button during playback and forward playback picture at high speed can be seen.

25. REWIND/VISUAL SEARCH BUTTON
Press to start rewind.
Press this button during playback and reverse playback picture at high speed can be seen.

26. PICTURE CONTROL
Adjust the picture so it is easy to see.

27. EJECT BUTTON
Press to remove cassette. The STOP button must be pressed before "EJECT".

28. PERI JACK
For connection with a TV with a PERI or DIN jack using an exclusive cable. See your dealer for details.

29. CAMERA PAUSE JACK
Connect Camera pause cable.

30. VERTICAL SYNC. ADJUSTMENT CONTROL
If you see vertical shaking on the TV screen in the still playback mode, rotate this control to minimize shaking.

31. AUTO/COLOUR SWITCH
AUTO: Circuits are automatically switched to colour or black/white mode. Set to this position when playing or recording PAL signal.
COLOUR: When recording PAL signal in the area very far from broadcasting station, the recorded picture may lose colour. In this case set to this position in recording and playback.

32. AERIAL INPUT SOCKET
Connect external aerial.

33. RF OUTPUT
Connect to TV aerial input.

34. RF CHANNEL CONTROL
Turn TSG ON/OFF switch to "ON" and rotate this control to set the video channel correctly.

35. TSG ON/OFF SWITCH
Set to ON and check that the video channel of your TV set is correct. After setting, set this switch to OFF.

36. MAINS LEAD

37. ATTENUATOR SWITCH
Generally set to the NORMAL position.
Set to "ATT-ON" when interference occurs in an area with a strong signal.

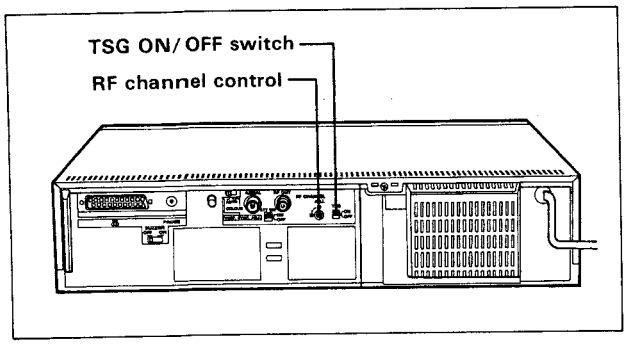
38. BUZZER SWITCH
When this switch is on, a beep sound will be heard when any VTR operation button is pressed. This is a convenience allowing you to operation.
To stop this function, turn the switch off.

39. SLOW BUTTON (Only for VT-130E)
Press SLOW button during playback, and the tape is played back in the forward direction approximately 10 times slower than the normal speed.

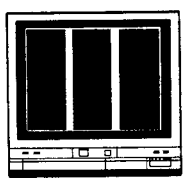
40. SLOW TRACKING CONTROL (Only for VT-130E)
Rotate this control to minimize noise in SLOW playback.

VIDEO CHANNEL SETTING

The RF converter changes the video and audio signals from a previously recorded video tape during playback to the same type of signal used for TV broadcasts. The RF converter output in this unit is pre-set prior to shipment to UHF channel 37.



1. Turn the TV on and select an unused channel (CH37) (in some cases this may be marked A/V).
2. Turn the OPERATE switch on.
3. Set the TSG ON/OFF switch to "ON". Then tune the TV until the test pattern shown below is received.



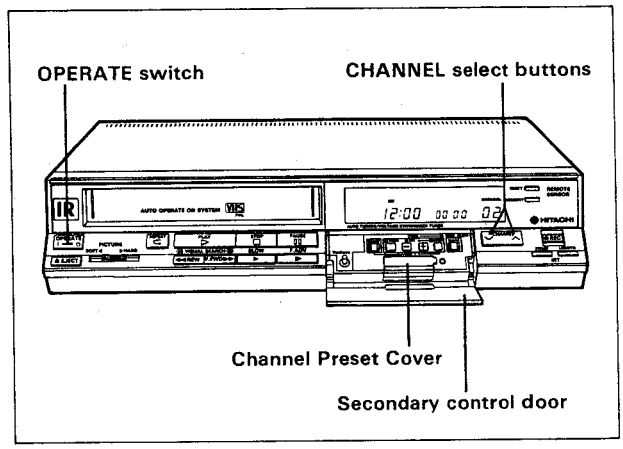
4. If it is not possible to correctly tune to the test pattern or channel 37 is used for broadcasting in your area, adjust the RF converter output with the RF channel control using a small screwdriver and re-adjust your TV until the test pattern is observed.
   For higher channel numbers, turn counterclockwise. For a lower channel, turn clockwise.
5. Having completed the adjustment, set the TSG ON/OFF switch to "OFF".

When connecting the VTR to a TV set provided with auto-tuning and the video channel cannot be set, operate as follows:

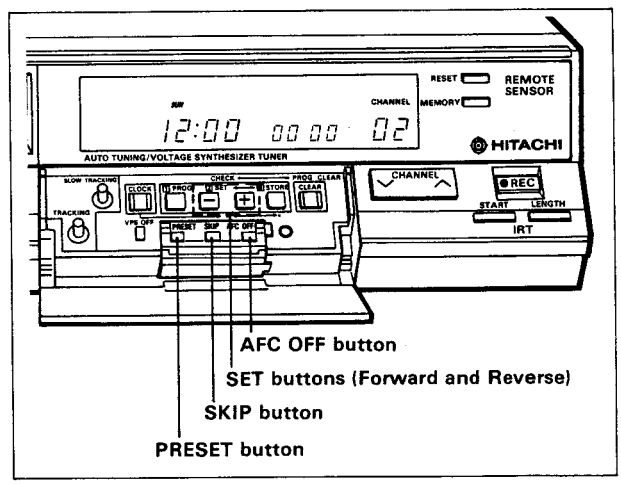
1. Remove the aerial cable from the AERIAL terminal on the VTR.
2. Leave the TSG ON/OFF switch "OFF".
3. Playback a blank tape.
4. Press the PAUSE button to obtain the pause mode.
5. Press the Auto-tuning button.
6. Auto-tuning starts and it stops at video channel 37.
   Note: The auto-tuning indicator of the TV set changes to an exact tuning indicator.
7. Set the channel memory of the TV to ON and store the channel which was set in item 6.
8. Set the TSG ON/OFF switch to "ON" and check that the picture appears on the TV screen.
   Now, the video channel of TV has been set properly.
9. Return the TSG ON/OFF switch to "OFF".
10. Reconnect the aerial cable to the VTR.

PRE-TUNING OF BUILT-IN TV TUNER

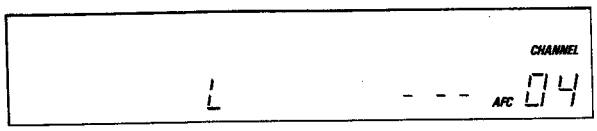
This VTR incorporates a complete television tuner with the required tuning controls. Once you have pre-tuned to preferred stations, you can select any of them by merely pressing the CHANNEL select button.



1. Turn the TV on and select the pre-tuned video channel.
2. Turn the OPERATE switch of the VTR on.
3. Open the Secondary control door to access the Pre-tuning controls.
4. Open the Channel Preset Cover.

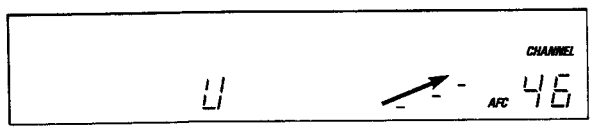


5. Press the PRESET button once.
   The display indication changes from the clock time display to the band indicator display.
   Note: Pressing the button twice will lock the display. If you have pressed it twice, press it once more.
6. Press the CHANNEL select button on VTR to select the channel to be memorized.
   Notes:
   1. The Channel Number Display can be now consecutively selected from "00" through "73" and then "95" through "99" and "AUX" by pressing the CHANNEL select button either upward or downward. In this case, Channel Number may be any number.
   2. When "AFC" is not indicated in the display, press AFC OFF button to display "AFC".

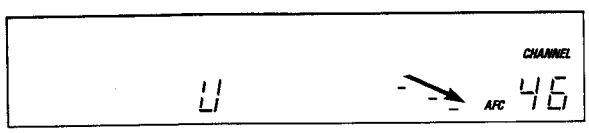


For example, the above diagram shows that channel 4 has been selected.

7. Press the SET button (Forward or Reverse) to start tuning.
   At a station that is broadcasting, the picture appears on the TV screen. If the station received is different from the channel to be preset, press SET button (Forward or Reverse) again.
   At the next station, the searching will stop and the new station can be preset. Repeat this until the desired station is reached. By repeating this, the Band indicator on the display will change in sequence L, H, U, L....
   Notes:
   - Press SET button (Forward); channels are searched in the order, VHF (1 — 12) → CATV (S1 — S20) → UHF (21 — 69), and "—" appears in sequence in the direction of the arrow during searching.



   - Press SET button (Reverse); channels are searched in the reverse order to the above, and "—" appears in sequence in the direction of the arrow.



8. Follow the same steps as explained in steps 6 and 7 above for other channels.
   You can preset up to 79 channels in memory.
9. After having completed tuning all channel memories you want, press the PRESET button once again.

These channels preset in memory as shown in the above can be selected by the CHANNEL select buttons on the VTR.
The provided sheet is used to list the programmes to which you pre-tune your VTR. List the programmes and paste the sheet on the side panel, etc. so as not to hinder you when you operate the VTR.

AFC (Automatic Frequency Control)
Since this unit has an AFC circuit, when a channel is preset following the above procedure, the AFC turns on automatically and you can receive the signal in optimum condition.
If a TV channel signal is marginal due to graininess or ghosting, the picture may sometimes be improved by manually tuning for best picture and then defeating the AFC action. To turn AFC off, follow the procedure below.

1. Select the desired channel by pressing CHANNEL select button.
2. Press the PRESET button once.
3. Press the AFC OFF button. "AFC" disappears from the display.
   Note: Pressing the button once again will turn the AFC on.
4. Tap on the SET button (Forward or Reverse) alternately for fine tuning.
5. Press the PRESET button once again.

Channel selection
The channel up and down controls on the VTR permit advancing the tuner directly to the next higher or lower programmed channel.

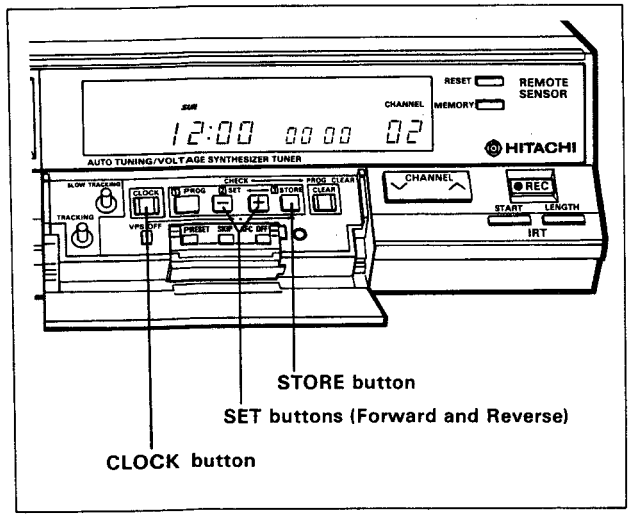
Eliminating unwanted preset channels
You can rearrange the desired channels by eliminating unwanted preset channels for channel up/down tuning.

1. Press the PRESET button once.
2. Press the CHANNEL select buttons until an unwanted channel is found.
3. Press the SKIP button once.
   Sound will go off indicating the channel has been erased from memory.
4. Repeat steps 2 and 3 until all unwanted channels have been erased.
5. After eliminating them, press the PRESET button once again.

Note: To restore the erased channel, repeat the above steps 1 through 3.

CLOCK TIME SETTING

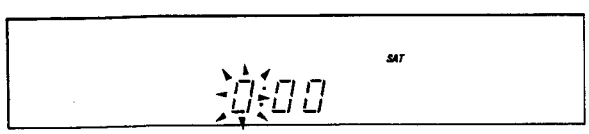
The built-in digital clock is based on a 24 hour cycle and gives you a constant readout of the time and day.



- When the MAINS lead is plugged in for the first time, "–:– –" will appear on the display.

1. Press the CLOCK button.
   "SUN" flashes on and off and "0:00" lights.

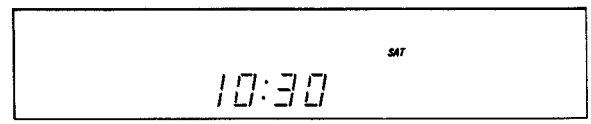
2. Press the SET button (Forward or Reverse) to select the present day of the week.
   Hold the button down to advance rapidly.
   When the present day of the week appears, press the STORE button. "0" hour starts flashing.



   For example, the above diagram shows that Saturday (SAT) has been set.
3. Press the SET button (Forward or Reverse) to set the present hour.
   Hold the button down to advance rapidly. Press the STORE button when the present hour appears.
   "00" minutes starts flashing.

   For example, the diagram shows that "10" hour has been set.

4. Press the SET button (Forward or Reverse) to set the minute.
   Hold the button down to advance rapidly. Press the STORE button when the present minute appears.



   For example, the diagram shows that "30" minutes has been set.

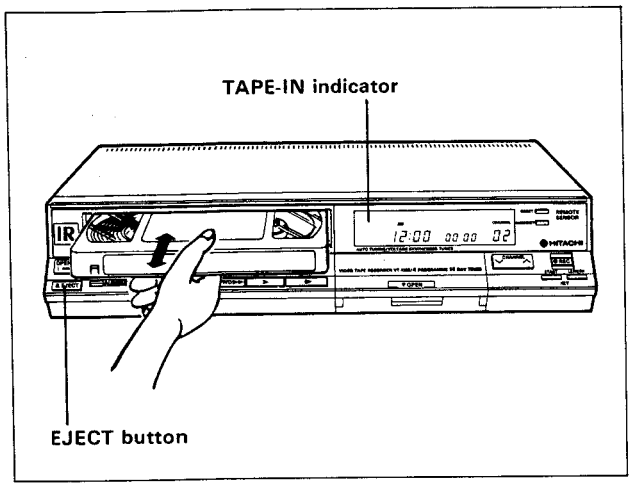
Now the clock has been set to the correct time of day.

Notes:

- This VTR has a built-in power failure compensation circuit. If power interruption of less than 5 minutes occurs, the clock time and programming will not be lost.
- The digital display is bright when the OPERATE switch is turned ON and automatically becomes dim when the switch is off.

CASSETTE TAPES

Insertion and removal of cassettes

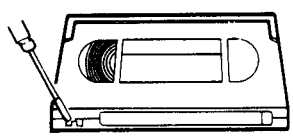


Insertion
Insert the cassette. Power is turned on automatically when the cassette is loaded.

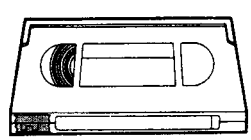
Removal
1. Turn the OPERATE switch on.
2. Press EJECT button.
3. Remove the cassette.

Refer to the instructions included with cassette for more information.

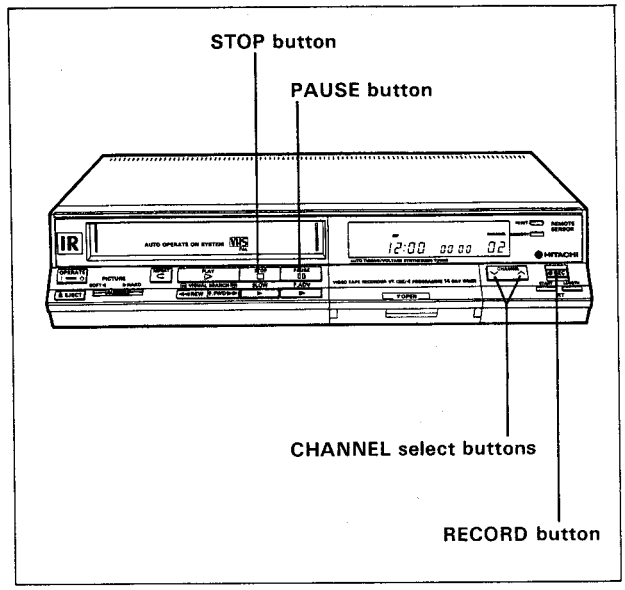
To avoid erasing a recording
Break off the safety tab using a screwdriver or similar tool.



To re-record on a cassette which has its safety tab removed
Cover the hole with cellophane tape.



RECORDING TV PROGRAMMES



- Your TV does not have to be on to make a recording because the VTR records TV programmes without the aid of your TV. Its only use is for monitoring.

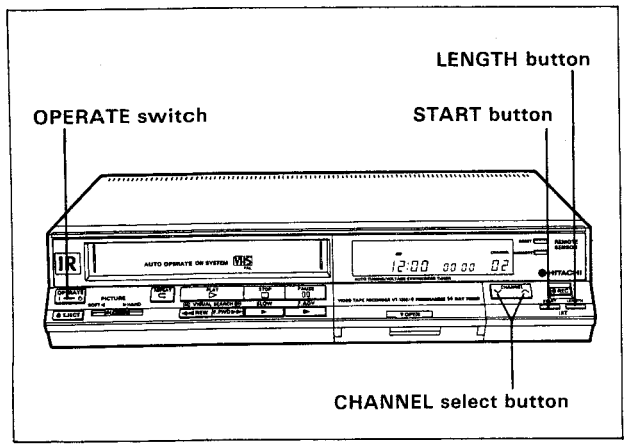
1. Insert a cassette.
2. Select the channel to be recorded by pressing the CHANNEL select buttons.
3. Press the RECORD button. Now, recording starts.
4. After finishing recording press the STOP button.

Notes:
1. If you wish to avoid recording unwanted material, press the PAUSE button. Press the PAUSE button again to release the pause mode. To prevent tape damage, do not leave the unit in the pause mode for more than 5 minutes.
2. If you want to change channels while in the record mode, press the PAUSE button then select the desired channel.
   Press the PAUSE button to release the pause mode.

To record one programme while viewing another
You can record one programme while viewing another by merely selecting the channel with your TV channel button. The recorded programme can be viewed later at your convenience.

INSTANT RECORDING TIMER (IRT)

Instant Recording Timer allows you to make simplified timer recording without using the programme timer. There are two simplified methods as explained below.



■ FOR IMMEDIATE RECORDING

1. Insert the cassette (one with the erase prevention tab intact) into the cassette loading door.
2. Press CHANNEL select button to select the channel to be recorded.
3. Press LENGTH button to set the timer to "0:00". Then press LENGTH once again to indicate the recording time on the display. The time changes in hours and minutes in the order of 0:30, 1:00, 1:30, 2:00, 3:00 and 4:00 every time the button is pressed. Recording starts when 0:30 is displayed. During recording, the remaining time is displayed.
4. At the end of recording the display reads 0:00; the VTR will automatically stop recording.

Note: The IRT feature does not operate during play and after a program timer recording has started. During rewind mode, the IRT recording will automatically start after the tape is rewound fully to the end.

■ FOR SIMPLIFIED TIMER RECORDING

1. First perform Steps 1 and 2 of "FOR IMMEDIATE RECORDING".
2. Press START button to select the start time. Each press will change the clock display (the start time) by increments of 10 minutes from the nearest 10 minutes of the hour.
3. Press LENGTH button for the recording time. The counter display is reset to hours and minutes in the order of 0:00, 0:30, 1:00, 1:30, 2:00, 3:00 and 4:00 every time the button is pressed.
4. Press OPERATE switch off, and the "⏲" indication will appear on the Display. The recording will start at the time you have selected and will automatically stop when the recording time display reads "0:00".

Notes:

1. The recording time can be extended any time during IRT by pressing LENGTH button . The recording time display will be reset to 0:30, 1:00, 1:30, 2:00, 3:00 or 4:00 as selected.
2. To stop the VTR during IRT, press LENGTH button until the recording time display reads 0:00, or press OPERATE switch and the STOP button within ten seconds.
3. To change the IRT program, the previous information must be first cleared.
4. If IRT and the program timer recording overlap, the former will override the latter.

To recall the IRT program

Press START or LENGTH button for recalling the start time and the recording time. In about 8 seconds the displays return to the present time of day.

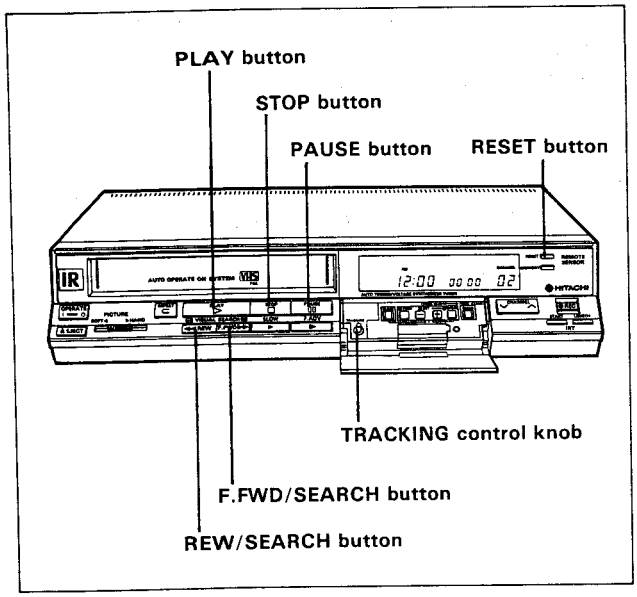
Note: To recall the start time or the recording time, press LENGTH button only once. Pressing more will change the recording time and cause a need for resetting.

To cancel Instant Recording

Press LENGTH button as many as may be required to indicate "0:00" on the display. After approximately 8 seconds the display will return to the present time of day, and IRT has been now cleared.

Note: OPERATE switch may be on or off.

PLAYBACK



1. Turn the TV set on and select the video channel.
2. Insert the cassette.
3. Press the PLAY button.
4. Press the STOP button to stop playback.

Tracking control adjustment

When playing prerecorded tapes or those recorded on units other than your own, black and white streaks may appear on your TV screen. If this occurs, adjust the TRACKING control until the streaks disappear. When playback of this particular tape is over, readjust the TRACKING control to its original position. The original position is normally in the center position.

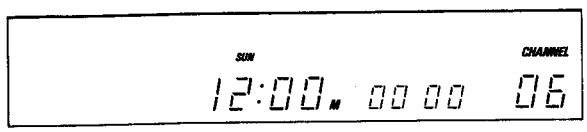
Tape counter

This indicates the amount of video tape transported as a number.
Press the RESET button to set the counter reading to "0000" when starting recording or playing back.
Note the number on the Tape counter at the beginning and end of each programme you record. This will allow you to use the counter to find the desired programme later.

Counter memory function

This is useful if there is a section of tape you want to view immediately after recording or you want to return to the same point several times.

1. Begin recording or playing back a tape.
2. At the point where you want playback to begin, reset the tape counter to "0000" by pressing the RESET button.
3. Press MEMORY button, and the "M" appears on the Display.



4. Continue to play or record.
5. Press the STOP button when recording or playback finishes.
6. Press the REWIND button.

The tape will automatically stop at the pre-selected "0000" position.
Actually, so that you won't miss the very first part of the programme to be viewed, the tape will stop slightly prior to "0000" at approximately the "9997" position.

Note: The counter memory function will also operate during fast-forwarding mode.

Automatic rewind

The VTR automatically rewinds the tape when the end of the tape is reached.

Rewind shut off

If OPERATE switch is pressed during rewind operation, power will be turned off automatically after the tape has been completely rewound.

Still playback

Press the PAUSE button to stop the picture on the screen during playback.
During still playback, press the PAUSE button to return to normal playback or the STOP button to stop the tape.

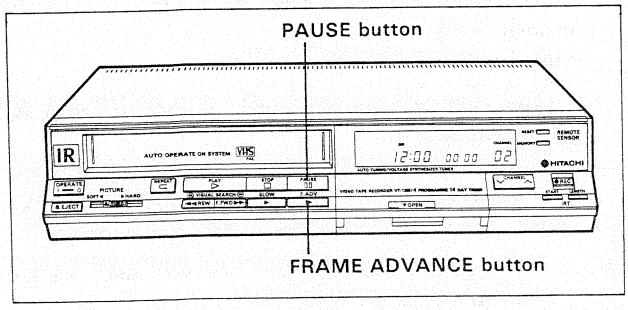
Notes:

- If you see vertical shaking on the TV screen in the still playback mode, rotate the VERT. SYNC. ADJ. control on the rear of the VTR to minimize shaking.
- When the still playback mode continues for about 5 minutes, the VTR switches to the stop mode automatically to prevent damage to the tape.
- During still playback picture FRAME ADVANCE button can be tapped to eliminate noise bands.

Visual search

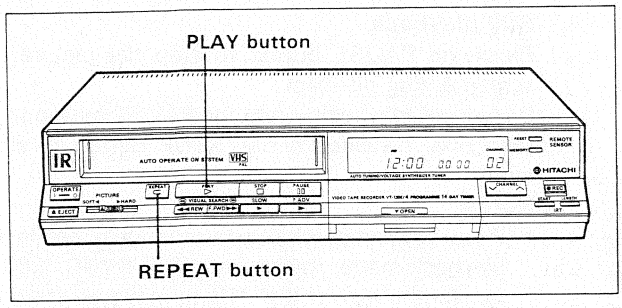
This allows you to view the picture from a recorded tape at high speed in both the forward and reverse directions.
Press the PLAY button to play a tape, then press either the VISUAL SEARCH button REW or F.FWD. Pictures can be viewed at high speed in either the forward or reverse direction.
Note: The playback picture will have some noise in the visual search mode.

Frame advance



Press the FRAME ADVANCE button during still playback mode to view one frame at a time. Hold it down to advance continuously. Operates only after PAUSE button has been pressed.

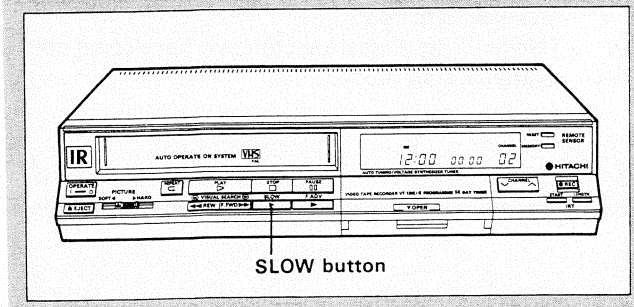
Repeat function



Use this function to repeat the scene you have just viewed during playback.

1. During playback, press PLAY button at the scene where you want the repeat of the playback to start. The playback continues.
2. Press REPEAT button. The tape is automatically rewound to the position where PLAY button was pressed, and playback is repeated.

Slow function (Only for VT-130E)



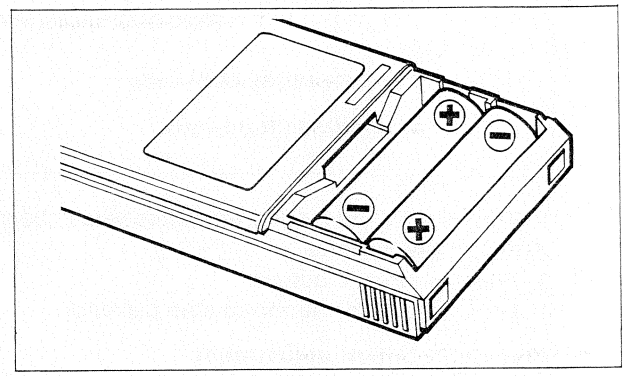
Press SLOW button during playback, and the tape is played back in the forward direction approximately 10 times slower than the normal speed.

REMOTE OPERATION

You can operate the VTR from a distance using the Infrared Remote Control unit which performs the same functions as the corresponding buttons on the VTR — except for its REMOTE ON/OFF switch, TIMER SET and RECORD buttons.

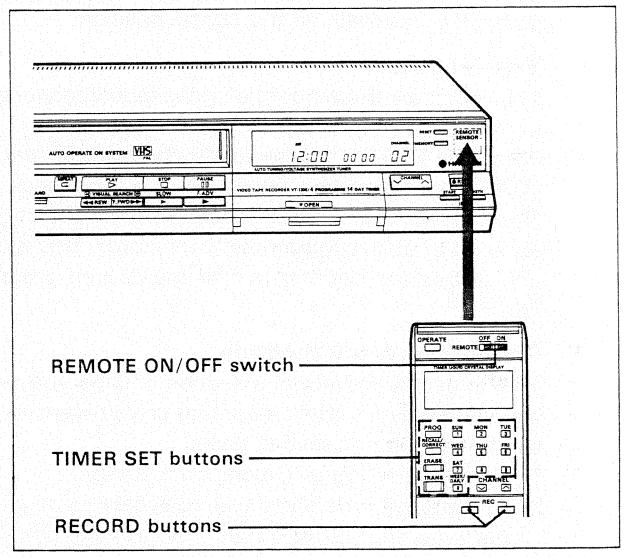
Power source of infrared remote control unit

The infrared remote control unit is powered by two batteries (size IEC standard R6). The life of the batteries is about a year although it depends on the numbers of times the unit is used. Replace the batteries when operation is not possible or when the distance becomes too small.



Operation of remote control

To use the infrared remote control unit aim it at the receiver on the front panel of the VTR and set REMOTE ON/OFF switch to ON.



Notes:

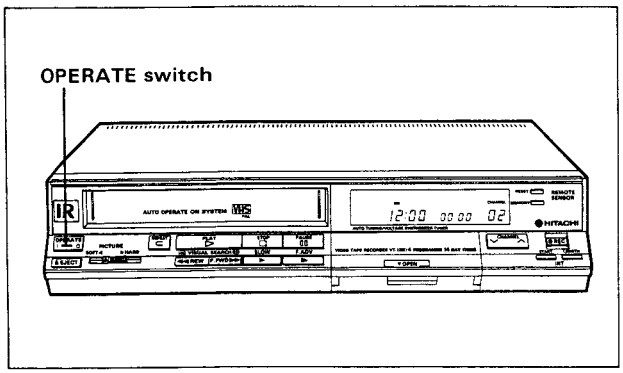
1. See the supplement manual for more information on using TIMER SET buttons.
2. Press RECORD buttons simultaneously on the remote control unit to record.
3. The infrared rays will bounce off the walls and eventually reach the receiver on the VTR, but for best results transmit rays directly to the receiver.

TIMER RECORDING

(The timer can also be programmed with the remote control unit provided. See the supplement manual for more details on programming procedures with the remote control unit.)

The programmable electronic clock/timer permits the unattended recording of 4 preselected programmes within a period of 14 consecutive days, including the same programme(s) repeated on every day and the same programme(s) every week. It turns the unit on and off and selects the channel automatically.

Preparations for timer recording

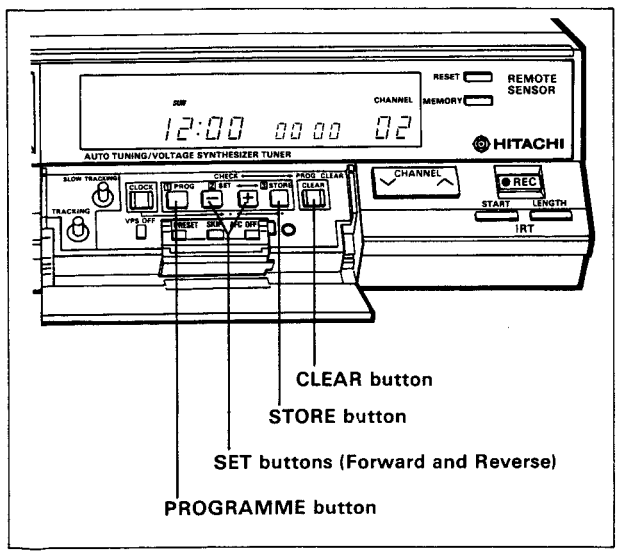


- Your TV does not have to be on to make a recording because the VTR records TV programmes without the aid of your TV. Its only use is for monitoring.

1. Make sure that the clock shows the present time and day correctly.
2. Insert a cassette.
   Be sure to check that the record safety tab is not missing. If the record safety tab is missing, recording will not begin.
3. Programme the timer.

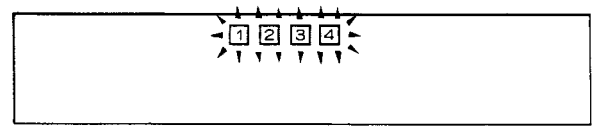
Programming the timer for unattended recording

For unattended recording the timer needs to know what **day** to make the recording, the **time to start**, the **time to stop**, and the **channel to be recorded**.



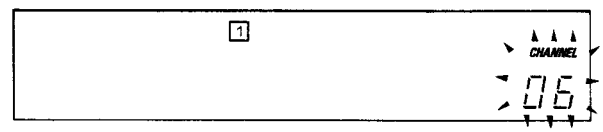
Note: If you input erroneous information by mistake when programming the timer, press the CLEAR button and input the correct information again.

1. Press the PROGRAMME button.
   Programme indicators (1 through 4) flash to indicate which memory positions have not been programmed. If a memory has been programmed, its indicator will not flash.



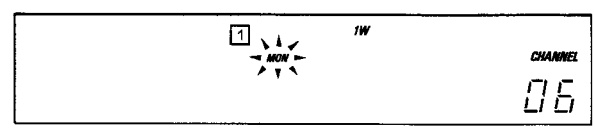
Note: You should determine which memory positions have not been programmed before entering new programming information. New information automatically erases previous programming.

2. Press the SET button (Forward) until the desired programme indicator lights. Programme indicators (1 through 4) light, in sequence, across top of digital display. Press the STORE button when the desired programme number is displayed. Channel number starts flashing.

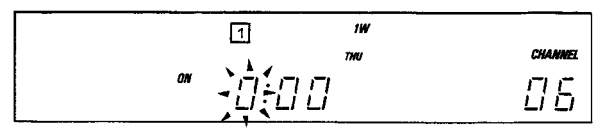


For example, above diagram shows programme "1" has been set.

3. Choose the channel to be recorded by pressing the SET or CHANNEL select button. Then press the STORE button.
   "1W" appears and the present day flashes.



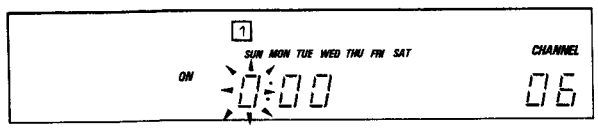
4. Press the SET button (Forward or Reverse) to select the day of recording. Make sure desired Week indicator (1W or 2W) lights. Continuing forward will advance timer to Week Two.
   Press the STORE button after selecting the day of recording. "0" hour starts flashing.



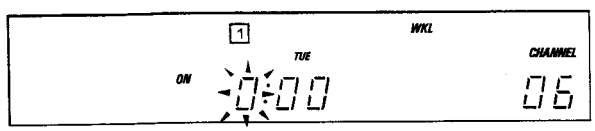
For example, above diagram shows recording on Thursday within 1 week from today.

Notes :

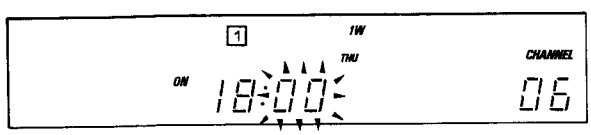
1. To record same time every day of the week:
   Press the SET button (Forward or Reverse) until all day indicators light. Hold down the button to advance rapidly. Then press the STORE button.



2. To record on a specified day at the same time each week:
   Press the SET button (Forward or Reverse) until the "WKL" indicator lights. Hold down the button to advance rapidly. Then press the STORE button.

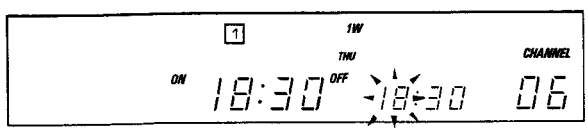


5. Select the hour for recording to start by pressing the SET button (Forward or Reverse). Hold down the button to advance rapidly.
   Press the STORE button after selecting the hour for recording to start.
   "00" minutes starts flashing.



   For example, the above diagram shows "18" hours has been set.

6. Select the minutes for recording to start by pressing the SET button (Forward or Reverse). Hold down button to advance rapidly. Press the STORE button after selecting the minute for recording to start.
   "OFF" will appear and "18" hour starts flashing.



   For example, the above diagram shows "30" minutes has been set.

7. Select the hour and minute to stop recording in the same procedures described in steps 5 and 6. Be sure to press the STORE button after selecting the minute.

   Now, one programming has been completed.
   After few seconds the display returns the clock time display together with letters "1" automatically.

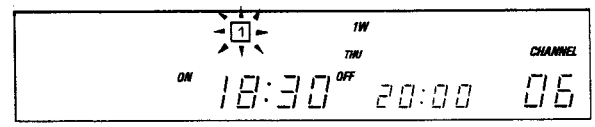
8. Turn off the OPERATE switch. The "◴" indicator will come on.

   Notes:

   1. If the erase prevention tab is removed, the cassette is ejected automatically and "◴" indication will flash. Stick a piece of cellophane tape over the erase prevention hole on the cassette to enable recording.
   2. The "◴" indication will flash, if a cassette is not inserted.

To clear a programme

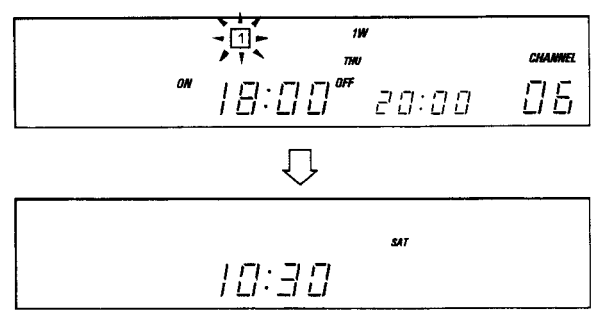
1. Press the SET button (Forward) until desired programme indicator flashes. Then start and stop time appear on the display.



2. Press the CLEAR button.
   The display returns the clock time display to show that the programming has been cleared. Be sure to press the CLEAR button while the display shows the start and stop time. The programming does not clear if the CLEAR button is pressed when the display returns the clock time display.

To check programming

Press the SET button (Forward).
The programme indicator "1" flashes. If the programme No. 1 has been already programmed, both start and stop times are displayed in a few seconds. The display then automatically returns to the present time of day.

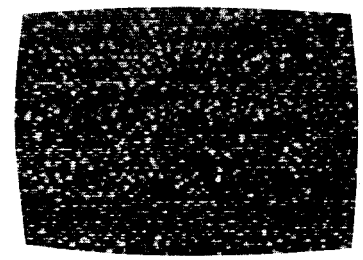


Programming errors

If programmes overlap, the VTR will select the programme with the earliest start time. When that programme is over, the VTR will switch to the next programme. If the start times are the same, the VTR will select the programmes in numerical order.

MAINTENANCE

1. To maintain the optimum performance of this VTR, regular periodic maintenance is required. Your dealer will advise you further.
2. Maintenance and adjustments may not be carried out by the user. In all cases of difficulty or doubt, consult your dealer.
3. Head cleaning
   - Dirt accumulated on the video heads after a period of time may cause the playback picture to become blurred or part of the video information to be lost. This does not mean that the recorded programme has been erased but head cleaning is required which must be carried out by your dealer.
   - Under no circumstances do we recommend users to attempt to clean the video heads as this is done only effectively by removal of the top cover to gain access to the video heads and other parts which require cleaning, which would expose live conductors and present a "shock" hazard.
   - In regard to the various head cleaning tapes which are currently available on the market, these can cause damage and also reduce the operational life of the video heads if used incorrectly. Please consult your dealer as to the suitability of any cleaning aids before purchase.



PROBLEM GUIDE

PROBLEM	THINGS TO CHECK	SOLUTION
No power	• Is mains lead connected?	• Connect mains lead with AC outlet.
Timer recording is not possible.	• Is the recording time set correctly? • Is the OPERATE switch set to "OFF"? • Is the record safety tab missing?	• Set the recording time correctly. • Set the OPERATE switch to "OFF". • Place cellophane tape over missing safety tab.
RECORD mode can't be engaged.	• Is the record safety tab missing?	• Place cellophane tape over missing safety tab.
Picture is poor in playback.	• Is the TV channel selector set to the proper channel? • Is the TV fine tuning set correctly?	• For playback, the TV channel selector should be set to channel 37. • Fine tune your TV.
Noise in picture in playback	• Are Video Heads clean?	• Head cleaning is necessary.
No picture in playback	• Is the TV set to the correct channel?	• Set to correct channel. (for your video channel)
Playback picture is partially noisy.	• Is the TRACKING control set to center position?	• Adjust TRACKING control for the best picture.
Off-the-air TV programme cannot be seen.	• Is connection correct?	• Connect correctly.

SPECIFICATIONS

Format:	VHS PAL Standard
Recording:	Rotary Two-Head Helical Scan Azimuth Recording
Tape Speed:	23.39 mm/sec.
Tape Width:	12.7 mm
Operation Temperature:	5°C to 40°C
Video:	PAL colour (system B & G) & CCIR monochrome signals 625 lines
Recording Time:	240 min. (with Hitachi E-240 cassette)
Aerial Input:	VHF channels 2 — 12 CATV channels S1 — S20 UHF channels 21 — 69
RF Output:	UHF channels 37 (30 — 39 adjustable) (System G)
Video Input:	0.5 to 1.5V p-p 75 ohm Unbalanced
Video Output:	1V p-p 75 ohm Unbalanced
S/N Ratio (Video):	40 dB
S/N Ratio (Audio):	43 dB
Horizontal Resolution:	Colour 240 lines
Audio Input:	−2 dBm 50 Kohm
Audio Output:	−2 dBm 10 Kohm
Audio Frequency Range:	70 Hz to 12 kHz
Power:	AC 220V 50 Hz
Power Consumption:	36W (including timer) (VT-125E) 37W (including timer) (VT-135E)
Timer:	24 hour digital indication
Cabinet Size:	435 mm(W) x 95 mm(H) x 344 mm(D)
Weight:	7.0 kg
Accessory Included:	1 — Aerial cable 2 — Programme sheets 1 — Infrared Remote control unit

* Design and specifications are subject to change without notice.

VPS (Video Programme System) FUNCTION

This VTR incorporates the VPS function.
If the VTR is tuned to a TV station transmitting the VPS signal, the VTR automatically takes any delay or extension of the programme into account and can record the specified programme.
For example, assume that you programme the timer for a football game on channel 8 from 19:00 to 20:45 on Saturday and the football game which is broadcast is changed to 21:00 to 23:00, the VPS function works and the VTR records the football game automatically from 21:00 to 23:00.
When the VTR is tuned to a station transmitting a VPS signal, "VPS" automatically appears in the display of the VTR.
Programming the timer for unattended recording automatically turns on the VPS function.

NOTES:

1. To switch off the VPS function, press the VPS OFF switch once during programming of the timer so the "VPS" display disappears.
   Pressing the switch again turns VPS on.
2. Always programme the timer for one TV programme to record the programme with the VPS function turned on. If you programme the timer for a football game and a movie on channel 3 sequentially from 10:00 to 14:00 for example, only the football game will be recorded but the movie will not.
   In this case, programme the timer with the VPS off or input the other programme using another programme number to turn the VPS function on again.
3. The VPS function also takes a programme that is early by 10 minutes into account and starts recording automatically 10 minutes earlier than the scheduled time.
4. When the VTR is tuned to a station transmitting a VPS signal but the signal conditions are poor, "VPS" will flash in the display.
   In this case, programme the timer with VPS turned off. If you programme the timer with VPS turned on, the VPS function does not operate normally.